

Peanut allergy and tree nut allergy

Peanuts and tree nuts can both cause serious allergic reactions which can be treated in the same way. If you think you or your child are allergic to peanuts or tree nuts, visit your GP to find out which nuts you need to avoid and how to manage your allergies.

What are peanut allergy and tree nut allergy?

Peanut and tree nut allergies are types of food allergy. Food allergy occurs when the body's immune system wrongly identifies a food as a threat. When this happens, the body releases chemicals, such as histamine, in response to exposure to the food. It is the release of these chemicals that causes the allergic symptoms.

The peanut is a legume and is in the same plant family as peas, beans and lentils. Tree nuts are in different plant families and include almonds, hazelnuts, walnuts, cashew nuts, pecans, Brazil nuts, pistachios and macadamia nuts. As the plant families are different, many people only react to peanuts but not to any tree nuts, and vice versa.

Many people who are allergic to tree nuts are only allergic to one type of tree nut, but some are allergic to more. For example, it's quite common for people with cashew nut allergy to be allergic to pistachios, and for people with walnut allergy to be allergic to pecans.

Peanut and tree nut allergies are common – they are the most commonly known foods to cause anaphylaxis. About 1 in 50 children and 1 in 200 adults in the UK have a nut allergy.

Pollen food syndrome and peanuts and tree nuts

Allergic reactions to peanuts and tree nuts can happen because a person already has hay fever caused by an allergy to pollen. This is called a 'secondary' nut allergy and happens because of "cross-reactivity", where the proteins in pollen are similar to the proteins in nuts. The most common tree nuts involved are hazelnuts, almonds and peanuts.

Reactions are very rarely serious and often include itching or swelling in the mouth.

[Read more about pollen food syndrome.](#)

What are the symptoms of peanut and tree nut allergy?

The symptoms of peanut and tree nut allergy usually come on quickly, within minutes of eating the food.

Mild to moderate symptoms may include:

- a red raised itchy rash (known as hives or urticaria) anywhere on the body
- swelling of the face, lips and/or eyes
- a tingling or itchy feeling in the mouth
- mild throat tightness
- stomach pain, vomiting or diarrhoea

More serious symptoms

More serious symptoms are often referred to as the ABC symptoms and can include:

- **AIRWAY** - swelling in the throat, tongue or upper airways, hoarse voice, difficulty swallowing
- **BREATHING** - sudden onset wheezing, breathing difficulty, noisy breathing, persistent cough
- **CIRCULATION** - dizziness, feeling faint, sudden sleepiness, confusion, pale clammy skin, loss of consciousness or collapse

The term for this more serious reaction is **anaphylaxis** (ana-fil-ax-is).

Most healthcare professionals consider an allergic reaction to be anaphylaxis when it involves difficulty breathing or affects the heart rhythm or blood pressure. Any one or more of the ABC symptoms above may be present.

In extreme cases there could be a dramatic fall in blood pressure. The person may become weak and floppy and may have a sense of something terrible happening. Any of the ABC symptoms may lead to collapse and unconsciousness and, on rare occasions, can be fatal.

[Read more about anaphylaxis.](#)

Getting a diagnosis

If you think you or your child may be allergic to peanuts or tree nuts, see your GP who can refer you to a specialist allergy clinic. They can find a clinic in your area from the [British Society for Allergy and Clinical Immunology \(BSACI\)](#).

It's important to get a referral even if the symptoms were mild because it can be hard to tell if future allergic reactions could be more serious.

Once you get a referral, the consultant will discuss your medical history and symptoms with you. They might suggest skin prick tests, blood tests, and food challenge tests to help diagnose the allergy and work out how serious it may be.

If you have reacted to one type of nut, the tests are likely to include a range of nuts to work out which ones are safe for you to eat.

[Read more about allergy testing.](#)

What can mean you're at higher risk?

Some clues that you or your child might be at higher risk of more serious reactions are:

- you have already had a serious reaction, with any of the 'ABC' symptoms
- you have asthma, especially if it is not well controlled
- you have reacted to a tiny amount of peanuts or tree nuts.

If you have asthma and it is not well controlled, this could make an allergic reaction worse. Make sure you discuss this with your GP or allergy specialist and take any prescribed medicines.

Treating symptoms

If you have mild allergic symptoms, you may be prescribed antihistamine medicine that you take by mouth. But if you are at risk of a serious allergic reaction (anaphylaxis), you may be prescribed adrenaline – the emergency medicine used to treat anaphylaxis. It is also known as epinephrine.

Because anaphylaxis can happen very quickly, adrenaline is available in different forms that are designed to be easy to use. It's important to know exactly how and when to use your prescribed adrenaline. Healthcare professionals can show you how to use it, and there are also resources such as practice devices and videos on manufacturer websites.

Options currently available on prescription in the UK include:

- **Adrenaline auto-injectors (AAIs)** – such as EpiPen and Jext.
- **Intranasal adrenaline** – EURneffy, a needle-free nasal spray.

You must carry two in-date forms of prescribed adrenaline at all times as a second dose may be needed if symptoms do not improve after five minutes or get worse.

[Find out more about what to do in an emergency.](#)

[Find out more about adrenaline.](#)

Avoiding foods that contain nuts

Once you have been diagnosed with a peanut or tree nut allergy, you will need to avoid the nut or nuts you're allergic to.

Read the ingredient lists on food packets carefully every time you shop. Peanuts and tree nuts are included in the list of top 14 major food allergens in the UK. This means they must be highlighted on ingredients labels, in bold for example.

Read the ingredient list every time you buy a product as manufacturers change their recipes often.

When eating out

Restaurants, cafes, hotels, takeaways and other catering businesses are required by law to provide information on major allergens, including nuts and peanuts. Ask staff directly if the food you'd like to buy contains nuts or peanuts and if there is a risk of cross-contamination. Let them know that even small quantities can cause a reaction. Don't be afraid to ask staff to check with the chef.

[Read about shopping and preparing food.](#)

These foods often contain peanuts or tree nuts

- satay sauce
- pesto sauce
- marzipan and praline
- salads and dressings
- multicultural cuisines (especially Thai, Indian and Chinese)

- vegetarian dishes such as nut loaf and nut roast
- vegetarian and vegan products
- gluten-free alternatives
- cakes, breads, biscuits and pastries
- muesli and granola
- cereal bars
- chocolates and other confectionery
- ice cream and desserts
- snack foods
- Peanut shoots – these look similar to bean sprouts

What about tree nut oils?

If you are allergic to tree nuts, avoid oils made from the nuts as well. Nut oils can be used for frying, baking and to make salad dressings.

Tree nut oils are also used in some medicines, toiletries and cosmetics. It's difficult to know whether these could cause a reaction so it's safest to avoid them completely. In cosmetics, they are labelled in Latin.

For more information about which foods and products can contain specific nuts and nut oils, see the list further down in this factsheet.

What about peanut oil?

Research has shown that refined peanut oil will not cause allergic reactions in most people with peanut allergy. This is because it contains no or very little peanut protein, which is the part that causes allergy.

[Read more about peanut oil.](#)

Should I avoid other types of nuts?

Some people with peanut allergy may be allergic to tree nuts, and some people with a tree nut allergy may be allergic to peanuts.

If you have a tree nut allergy, it's possible to be allergic to more than one type of nut. For example, it's quite common for people with cashew nut allergy to be allergic to pistachios, and for people with walnut allergy to be allergic to pecans.

If you have a peanut or tree nut allergy, it's important to have allergy testing for other nuts so you know what's safe to eat and what to avoid. It's good to eat the nuts you are **not** allergic to as this helps avoid developing an allergy to those nuts in the future.

Only introduce other nuts into your diet after allergy testing and talking to your specialist to make sure they're safe for you. You will also need to make sure there has not been cross-contamination between different nuts, such as in a packet of mixed nuts.

Be aware of cross-contamination with other nuts

When eating other nuts you are not allergic to, be aware of the risk of cross-contamination. It's possible that one type of nut will come into contact with other types during food production. Eating nuts from the shells can help reduce this risk.

Are there any other foods I might be allergic to?

Foods with 'nut' in the name

Some foods have 'nut' in the name but are not tree nuts, such as pine nuts, coconut, nutmeg and chestnut. If you have never had a reaction to any of these foods, it's likely that they are safe for you to eat.

Legumes

Peanuts are legumes, and a small number of people with peanut allergy may react to other legumes such as lupin, soya, peas, chickpeas, fenugreek, beans and lentils.

Sesame seeds

If you're allergic to both peanuts and tree nuts, you may be more likely to have a sesame seed allergy.

Speak to your allergy specialist to make sure you know what's safe to eat.

Which foods and cosmetics contain tree nuts?

Almonds

- Marzipan, frangipane, praline and some cakes such as Bakewell tart.
- Multi-cultural dishes and some breads such as Peshwari naan.

- Almond milk, ground almonds, almond flour (often used in gluten-free products), almond powder, almond essence (sometimes added to cakes and biscuits) and almond extract.
- Almond oil is sometimes used in confectionery and pastries and for shallow frying fish.
- Almond flavouring is sometimes made from almonds.
- Some liqueurs such as some brands of Amaretto. If in doubt, contact the manufacturer or visit their website.
- Almond ingredients can be found in cosmetic products such as creams, soaps, shampoos, hair conditioners and massage oils. Look for the Latin names *Prunus amygdalus amara* (bitter almond) and *Prunus amygdalus dulcis* (sweet almond).

Brazil nuts

- Some chocolates such as Cadbury Roses, but they're used in confectionery less often than some other nuts.
- Brazil nut butter.
- Brazil nut oil, sometimes used to make salad dressings.
- In cosmetics, look for the Latin name *Bertholletia excelsa*.

Cashew nuts

- Pesto sauce.
- Multi-cultural cuisines, particularly sauces.
- Cashew nut butter and cashew milk.
- Cashew nut oil is not usually used in foods in the UK, but check ingredients lists in case.
- In cosmetics, look for the Latin name *Anacardium occidentale*.

Hazelnuts (also known as filberts or cob nuts)

- Chocolate spreads, praline, nougat and confectionery.
- Hazelnut butter and hazelnut milk.
- Some liqueurs such as Frangelico Hazelnut Liqueur.
- Hazelnut oil can be used for baking, salad dressings and shallow frying fish.
- Dukkah and za'atar. Dukkah is a spicy dry dip and seasoning mix. Za'atar is a mixture of sesame seeds, herbs and spices which sometimes includes hazelnuts. It is mixed with oil and sprinkled over foods such as salads, soups and white cheese.
- In cosmetics, look for the Latin names *Corylus rostrate*, *Corylus americana* and *Corylus avellana*.

Walnuts

- Salads such as Waldorf salad.
- Pickled walnuts.

- Cakes such as carrot cake and banana bread.
- Walnut butter.
- Some brands of Worcester sauce.
- Walnut oil can be used for salad oils and dressings or drizzled onto grilled food.
- In cosmetics, look out for the Latin names *Juglans regia* and *Juglans nigra*.

Pecans

- Desserts and confectionery products such as pecan pie and pecan praline.
- Pecan butter.
- Pecan oil can be used for frying and baking and salad dressings.
- In cosmetics, look out for the Latin name *Carya illinoensis*.

Pistachios

- Desserts and confectionery, such as chocolates and puddings.
- Pistachio butter, spread and cream.
- Multi-cultural cuisines, especially desserts such as baklava, gelato and turkish delight.
- Pistachio oil can be used as a salad dressing.
- In cosmetics, look for the Latin names *Pistacia vera* and *Pistacia manshurica*.

Macadamia nuts (also known as the Queensland nut)

- Desserts and confectionery products such as chocolates.
- Macadamia nut butter or spread.
- Macadamia nut oil can be used for baking, salad dressings or drizzled onto grilled food.
- In cosmetics, look for the Latin names *Macadamia ternifolia* and *Macadamia integrifolia*.

Is contact through touch or smell a risk?

People with peanut and allergy often worry that touching or smelling nuts could cause a serious reaction, but research suggests this is not common.

One small study showed that when 30 children with serious peanut allergy had contact with peanut butter through touch or smell, none of them experienced anaphylaxis and none reacted to smell. A third had a mild reaction to touch including redness, itching or rash in a small area, but these were not serious, and no medication was needed. The researchers concluded that at least nine out of ten children with similar allergies would not have a serious reaction to touch or smell, but the study only looked at peanut butter, not other forms of peanut.

In another study, 84 children were positioned half a meter away from a bowl of peanuts for half an hour and none of them had a moderate or serious reaction. The researchers also collected peanut proteins from the air and the amounts of peanut protein were so small they were very unlikely to be able to cause moderate or serious allergic reactions. These studies only looked at peanuts, but there is no reason to think that tree nuts would be any different.

What are the risks during air travel?

Some people with nut allergies have had symptoms when travelling on aeroplanes.

As nut proteins don't easily become airborne, the most likely sources of nut exposure during flights are:

- dust from the nuts on unwashed surfaces that comes into contact with your mouth or eyes by accident – take wet wipes with you and clean surfaces such as fold-down trays as soon as you get to your seat.
- believing that a food does not contain nuts when in fact it does.

Speak to your doctor or allergy specialist about travelling safely by plane. If you think you have reacted to breathing in nut protein in the past, then contact the airline well in advance to ask that nuts are not given out on your flight.

Will the allergy be lifelong?

Between about one in five and one in ten children are thought to outgrow their nut allergies. This usually happens by the age of 4 or 5, but the age at which this happens varies so it's helpful for your child to have regular reviews with their allergy specialist.

Hopes for the future

New treatments for peanut allergies have been studied intensively over the last decade and options are now emerging, including:

- oral immunotherapy – there is already a licenced treatment for peanut allergy in children aged 4-17 that has been approved for use on the NHS.
- epicutaneous immunotherapy (skin patches)
- peanut allergy vaccines
- new medicines known as “biologicals” which switch-off steps in the immune process that lead to an allergic reaction.

Desensitisation treatment for younger children is becoming more widespread. Read our [factsheet on Immunotherapy](#) and keep an eye on our [Latest News](#) for updates.

Key messages

- If you think you may have a peanut or tree nut allergy, visit your GP.
- If you are prescribed adrenaline, carry two doses with you at all times.
- Read food labels carefully and question staff in restaurants, takeaways and anywhere you eat out of home.
- Always be guided by your allergy specialist on which foods to avoid.
- There is hope for the future with major advances in the development of treatments for peanut allergy.

Feedback

Please help us to improve our information resources by sending us your feedback at:

<https://www.anaphylaxis.org.uk/information-resources-feedback/>

Sources

All the information we produce is evidence-based or follows expert opinion and is checked by our clinical and research reviewers. If you would like to know the sources we used in producing any of our information, please contact info@anaphylaxis.org.uk and we will gladly supply details.

Reviewers

The content of this Factsheet has been peer reviewed by Professor Adam Fox, Consultant Paediatric Allergist, Evelina London Children's Hospital and Professor John Warner, Professor of Paediatrics, Imperial College, London and Hon. Professor University of Cape Town, South Africa

Disclosures

We are not aware of any conflicts of interest in relation to the review of this factsheet.

Disclaimer

The information in this Factsheet is given in good faith. Every effort has been made to ensure accuracy. Everyone is different, and specific cases need specific advice. There is no substitute for good medical advice provided by a medical professional.

About Anaphylaxis UK

Anaphylaxis UK is the only UK-wide charity solely focused on supporting people at risk of serious, life-threatening allergic reactions. We provide information and support to people living with serious allergies through our free national helpline and local support groups. We also fundraise to achieve our ultimate aim, to create a safer environment for all people at risk of serious allergies. Visit our website www.anaphylaxis.org.uk and follow us to keep up-to-date with our latest news. We're on Facebook @anaphylaxisUK, LinkedIn, Instagram @anaphylaxisUK, Twitter @AnaphylaxisUK and YouTube.